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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,755	07/07/2003	Kevin McQuistian	283359-00368	6137

3705 7590 01/10/2005

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EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,755

Applicant(s)

MCQUISTIAN ET AL.

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-10 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 11-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02042004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276 B1) in view of Hartung (US 4,637,579).

Claims 1, 5-6

McQuistian discloses a linkage structured to operatively extend between a railroad switch machine and a pair of movable rails of a railroad switch, the linkage comprising a pair of first rail lugs (A, D), see attached sketch; a pair of second rail lugs (B, C); one of the first rail lugs and one of the second rail lugs being structured to be operatively connected with one of the movable rails, the other of the first rail lugs and the other of the second rail lugs being structured to be operatively connected with the other of the movable rails; an operating spread rod (E) adjustably extending between the first rail lugs; an operating lug (F) structured to be connected with an operating rod of the railroad switch machine as shown in fig. 2; an operating connecting rod (G) adjustably extending between the one of the first rail lugs and the operating lug (F); a lock spread rod (28) adjustably extending between the second rail lugs as shown in fig. 1; a lock lug (8) coupling structured to be connected with a lock rod (30) of the railroad switch machine; a lock connecting rod (34) adjustably extending between the one of the

Art Unit: 3617

second rail lugs and the lock lug (8); a point detector lug (12) structured to be connected with a point detector rod (40) of the railroad switch machine, a point detector connecting rod (44) adjustably extending between the one of the second rail lugs and the point detector lug; the operating spread rod, the operating connecting rod, the lock spread rod, the lock connecting rod each being substantially straight and at least partially threaded. The connecting rods being each independently adjustable.

McQuistian teaches all of the features as listed above but does not disclose a point detector connecting rod that is substantially straight and at least partially threaded. The general concept of providing a point detector connecting rod that is substantially straight to a linkage structure of a switch machine is well known in the art as illustrated by Hartung which discloses the teaching of a point detector connecting rod (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of a point detector connecting rod that is substantially straight and at least partially threaded in his advantageous linkage structure of a switch machine as taught by Hartung in order to facilitate maintenance of the linkage structure.

3. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McQuistian (US 6,648,276 B1) in view of Hartung and Schwiede (US 20020060273 A1).

Claims 7-10

McQuistian and Hartung teaches all the limitations of claims 7-10 except for switching assembly comprising a point detector connecting rod that is substantially straight and at

least partially threaded in addition to a first hollow tie housing the operating connecting rod and lock rod and a second hollow tie housing the lock spread rod, the lock connecting rod, and the point detector connecting rod. The general concept of providing a point detector connecting rod that is substantially straight to a linkage structure of a switch machine is well known in the art as illustrated by Hartung which discloses the teaching of a point detector connecting rod (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector. Also, the general concept of providing "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" in a switching assembly is well known in the art as illustrated by Schwiede which disclose the teaching of "a first hollow tie (2a) housing an operating connecting rod and lock rod and a second hollow tie (2b) housing the lock spread rod, the lock connecting rod, and the point detector connecting rod" in a switching assembly, see col 1, lines 20-60. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of a point detector connecting rod that is substantially straight and at least partially threaded in his advantageous linkage structure of a switch machine as taught by Hartung in order to facilitate maintenance of the linkage structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify McQuistian to include the use of "a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod" in his advantageous switching assembly as taught

Art Unit: 3617

by Schwiede in order to prevent movement at the switch location leading to deformation and damage of the switch parts in addition to difficulty and cost during standard tamping and maintenance of the rail bed.

Allowable Subject Matter

4. Claims 2-4, 11-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 11/19/04 have been fully considered but they are moot in view of the new ground of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Bone is cited to show related linkage system of a switch machine comprising a point detector connecting rod that is straight and threaded.

Heim et al are cited to show related cross-ties for housing a linkage structure of a switch machine.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules
Primary Examiner
Art Unit 3617

FFJ

January 6, 2005

FRANTZ F. JULES
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz F. Jules', written over the printed name and title.